INSTALL GUIDE

1150 Series Remote Starters

U.S.A. Model

REMOTE STARTERS

CAR ALARMS

ULTRA START
GO THE DISTANCE!

WWW.ULTRASTARTERS.COM

Note: Some features may not be available on certain models.

ATTENTION
! -The system must be placed into Service Mode before any service work is started on the vehicle. It is the sole responsibility of the vehicle owner to ensure that this is done. The manufacturer accepts no liability or responsibility for accidental starting of the vehicle.
- CARBON MONOXIDE - Never Start in an Enclosed Building (Garage, Carport etc...)

Components

- Control module
- 6 pin main harness with dual 30amp power inputs
- 2 Pin keyless entry harness
- LED/Program Switch

- Hood pin safety switch
.- 14 pin harness
- Installation guide

Diagnostics

PARK LIGHTS	STATUS LED	DIAGNOSTIC CODE
3 Slow Flashes	LED's On Solid	System Is In Service Mode
5 Flashes	Series of 5 Flashes	Hood Pin Opened
5 Slow Flashes	Series of 5 Flashes	Ignition On During Start Attempt
6 Flashes	Series of 6 Flashes	Brake Pedal Shutdown
7 Flashes	Series of 7 Flashes	Tach Lock-Out
8 Flashes	Series of 8 Flashes	3 Start Attempts with no start

Diagnostic Memory- With Program LED/Switch.

If the remote starter has a failed start attempt or if a safety input is activated the Diagnostic Memory will store up to four shutdowns in memory. This information can then be accessed to determine the source of the shutdown.

To Enter Diagnostic Mode:

Step 1 - Turn the ignition on wait two seconds then turn off. Press the Program Button and release.

Step 2 - The system will respond with three park light flashes and the horn will honk (optional) the same number of times as the events in memory. (Maximum four events, four honks)

NOTE: If the horn does not honk, there are no events in memory.

Step 3 - Press the Program Button once to view the last shut down code. The (optional) Horn will honk once to confirm code one. (If the horn does not honk, there are no codes in memory).

Step 4 - The LED's will flash a code corresponding to a shut down trigger. Press the Program Button again to check the second code. The horn will honk twice to confirm code two.

Step 5 - To **Clear Diagnostic Memory.** While in Diagnostic Mode press and hold the Program Button for five seconds. The park lights will flash and the horn(optional) will honk once.

NOTE: Once diagnostic memory has 4 shutdown events in memory, the system will not record any further shutdown events until the system memory has been cleared.

System Service Mode (Valet Mode)

Service Mode is to used when the vehicle is having service work preformed on the vehicle. Service Mode will disable the remote starter from activating until the service mode is Deactivated.

ACTIVATING Service Mode

1.While the ignition is "ON" press and hold the Program Button for five seconds. The park lights will flash five times and the horn (optional)will honk five times to confirm that the system is in Service Mode.
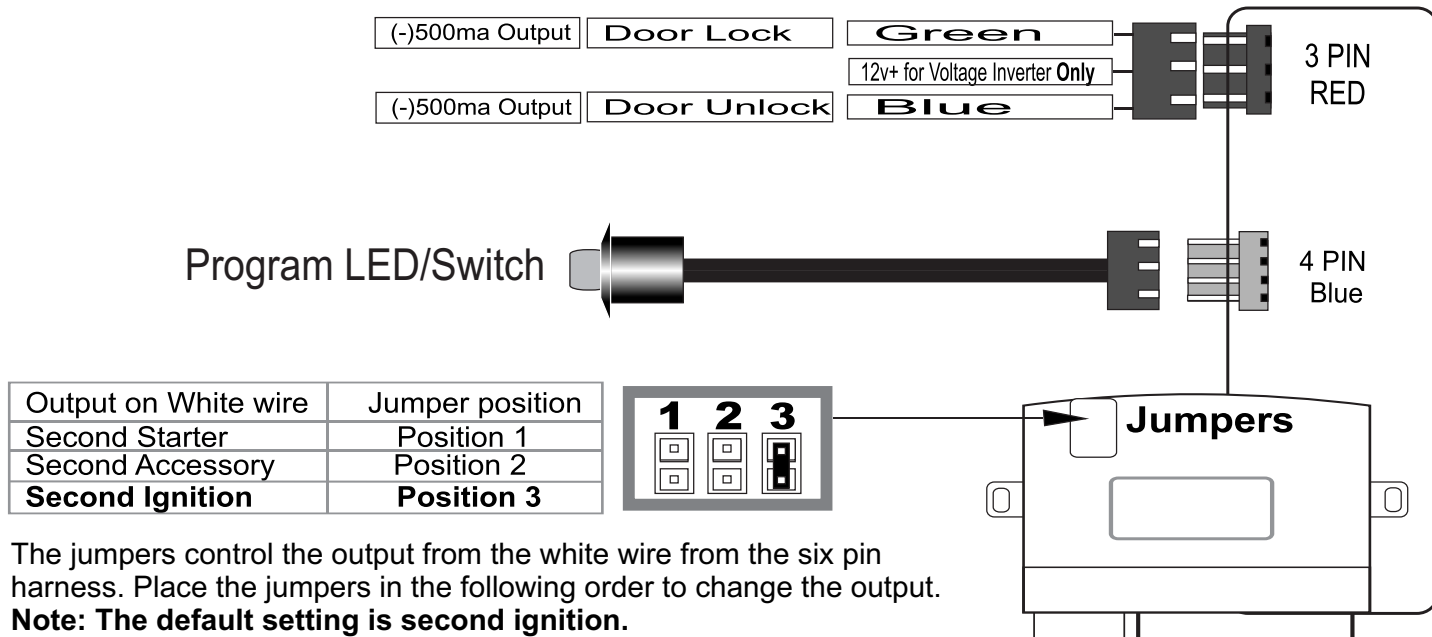
2. While in Service Mode the remote start functions will be disabled and LED's will be "ON" steady. Door locks and trunk release are still operational.

DEACTIVATING Service Mode

1. While the ignition is "ON" press and hold the Program Button for five seconds. The park lights will flash two times and the horn (optional)will honk two times to confirm that the system has exited Service Mode.
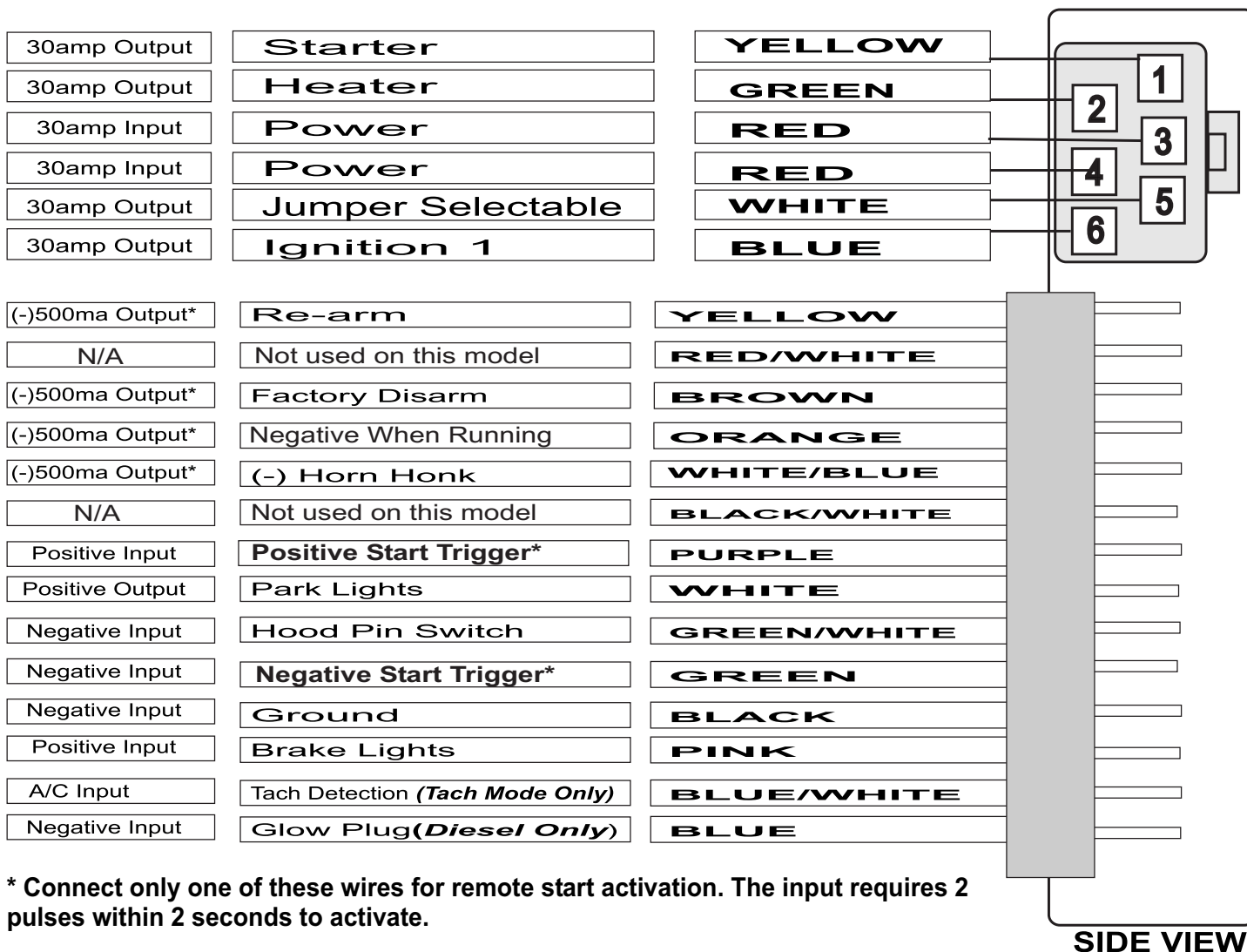
2. Remote start functions will return to normal operation.

WIRING DIAGRAM

30amp Output	Starter	YELLOW
30amp Output	Heater	GREEN
30amp Input	Power	RED
30amp Input	Power	RED
30amp Output	Jumper Selectable	WHITE
30amp Output	Ignition 1	BLUE

```
        2  1
           3
        4
           5
        6
```

(-)500ma Output*	Re-arm	YELLOW
N/A	Not used on this model	RED/WHITE
(-)500ma Output*	Factory Disarm	BROWN
(-)500ma Output*	Negative When Running	ORANGE
(-)500ma Output*	(-) Horn Honk	WHITE/BLUE
N/A	Not used on this model	BLACK/WHITE
Positive Input	**Positive Start Trigger***	PURPLE
Positive Output	Park Lights	WHITE
Negative Input	Hood Pin Switch	GREEN/WHITE
Negative Input	**Negative Start Trigger***	GREEN
Negative Input	Ground	BLACK
Positive Input	Brake Lights	PINK
A/C Input	Tach Detection *(Tach Mode Only)*	BLUE/WHITE
Negative Input	Glow Plug(*Diesel Only*)	BLUE

* Connect only one of these wires for remote start activation. The input requires 2 pulses within 2 seconds to activate.

SIDE VIEW

(-)500ma Output	Door Lock	Green
	12v+ for Voltage Inverter **Only**	
(-)500ma Output	Door Unlock	Blue

3 PIN
RED

Program LED/Switch

4 PIN
Blue

Output on White wire	Jumper position
Second Starter	Position 1
Second Accessory	Position 2
Second Ignition	**Position 3**

```
1  2  3
```

Jumpers

The jumpers control the output from the white wire from the six pin harness. Place the jumpers in the following order to change the output. **Note: The default setting is second ignition.**

WIRING CONNECTIONS

6 Pin Power Connector

Yellow	Starter	30amp output	*12volts during crank only.*
Green	Heater	30amp output	*12volts in accessory off during start.*
Red	12 power	30amp input	*Constant 12volt power at ignition harness.*
Red	12 power	30amp input	*Constant 12volt power at ignition harness.*
Blue	Ignition 1	30amp output	*12volts in ignition and start positions.*
White	Select Output	30amp output	*Selectable Output. See jumper diagram.*

14 Pin Connector

Yellow	Re-Arm	0.75sec Pulse On Shutdown. *(500ma Output)*
Red/White	N/A	Not Used on this model.
Brown	Disarm	0.75sec Pulse With Unlock And Before Start. *(500ma Output)*
Orange	(-) Output	(-) While Running
White/Blue	Horn	(-) Horn Honk Output
Black/White	N/A	Not Used on this model.
Purple	(+) Start	Connect to positive start input.
White	Park Lights	Positive Park light Output - *10 Amp Max.*
Green/White	Hood Pin	Negative Hood Pin Input - *MUST BE CONNECTED!!*
Green	(-) Start	Connect to negative start input.
Black	Ground	System Ground Input - *MUST BE CONNECTED!!*
Pink	Brake	Positive Brake Input - *MUST BE CONNECTED!!*
Blue/White	Tach	Tach Signal Input - *Must be connected for Tach Mode!!*
Blue	Glow Plug	Programmable Input - *DIESEL ONLY.*

* Connect only one start input. The start input will require 3 negative pulses within 2 seconds To activate the remote starter.
Note: 500ma outputs are low current and are designed to activate relays.

4 Pin Connector Blue - Program LED/ Switch

Program LED/Switch connector. The program switch is integrated into the LED. Press the LED to activate the switch.
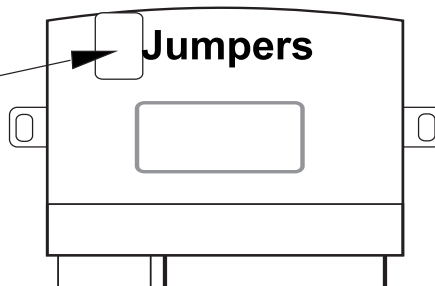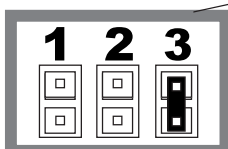
Jumper Selections

Position One	*Second Starter*	Output On the White Wire From The 6-Pin Connector.
Position Two	*Second Accessory*	Output On The White Wire From The 6-Pin Connector.
*Position Three	*Second Ignition*	Output On The White Wire From The 6-Pin Connector.

* The Default Setting For The System Is Second Ignition Output.

The jumpers control the output from the white wire at the 6-pin harness. Place the jumper in the following positions to change the output.
Note: The default jumper setting is second ignition.

Output on White wire	Jumper position
Second Starter	Position 1
Second Accessory	Position 2
Second Ignition	**Position 3**

Jumpers

INSTALLATION MANUAL

QUICK START INSTALL

Step 1 - Connect All Of the Following Wires

6 Pin Power Connector

Yellow	**Starter Output**	Connect To The Vehicles Starter Wire.
Green	**Heater Output**	Connect To The Vehicles Accessory Wire.
Red	**12 power Input**	Connect to Constant 12 Volt Power Source**- High Current.**
Red	**12 power Input**	Connect to Constant 12 Volt Power Source**- High Current.**
Blue	**Ignition 1 Output**	Connect To the Vehicles Primary Ignition.
White	**Selectable Output**	Select Jumper Position (If Necessary). **See Page 5.**

14 Pin Power Connector

Black	System Ground	Connect To Chassis Ground.
Pink	Brake Switch	Connect To (+) When The Brake Pedal Is Applied.
White	Park Lights	Connect To (+) Park Light System.
Green/White	Hood Pin	Connect To Hood Pin Switch. *(Must Be Connected)*
Blue/White	**Tach**	Connect To A/C Tach Souse *(Tach Mode Only)*
Green*	**(-) Start**	Connect to Negative start activation input.
Purple *	**(+) Start**	Connect to Positive start activation input.

* Connect only one start input. The start input will require 3 negative pulses within 2 seconds to activate the remote starter.
** The start input can be connected to such things as factory keyless entry (Connect to unlock wire) or an auxiliary output from a aftermarket alarm system.

Step 2- Auto Tach/ Tachless Learning (TL Models)

TACH LEARNING
1) Make all the required wire connections and plug-in the Unit.
**The park lights should flash twice upon power up.
2) Turn the Ignition Key ON. (The Park Lights will turn on).
3) Start the vehicle with the key, the program LED will come when proper tach signal is detected. After 30 seconds the park lights will turn off then flash twice to confirm Tach learning.
* The system will flash the park lights seven times if not Tach/ Tachless learned and the start button is pressed. The system must be Tach/ Tachless learned before remote starting.
** If the program LED does not come on during tach learn, a proper Tach signal was not detected.
Note: If the park lights do not flash in Auto Tach Learn Mode it may be necessary to connect to a different tach source. For best results connect the tach to the coil pack or to a fuel injector wire.

TACHLESS LEARNING (TL Models Only)
1) Make all the required wire connections and plug-in the Unit.
**The park lights should flash twice upon power up.
2) Turn the Ignition Key ON. (The Park Lights will turn on).
3) Start the vehicle with the key, the program LED will turn on after 30 seconds then the park lights will turn off and flash twice to confirm Tachless learning.
Note: If the first ignition wire is connected to a wire that does not stay 12 volts in the start position the system will not Tach/ Tachless learn.
***The system must be reset to re-Tach/Tachless learn.

Your Basic Install Is Complete!

Programming Overview

Program mode allows you to adjust the settings and options of your system. Your system has been intelligently designed by installers with years of experience. The system's default settings do not require any program changes in most cases. However, this system does incorporate a highly advanced programming system that can be easily adjusted for custom installations and applications.

Entering Program Mode

1) Make sure ignition is in the off position.
2) Within three seconds turn the key ON - OFF - ON - OFF - ON. **Leave in the "ON" position.**
3) Press and release the Program Button.
4) The park lights will come on and the horn (optional) will honk to confirm Program Mode.

* Turning off the ignition or 30 seconds of no activity will exit the Program Mode. This will be confirmed by 1 long horn honk and park light flash.
: *If the unit does not enter Program Mode, turn ignition off for 5 seconds and repeat steps 1-4. *
The first ignition(Blue)**MUST** be connected to the vehicle's first ignition wire. If it is not connected It will not be possible to enter the Program Modes.

Changing the Programmable Settings

1) Enter **Program Mode**. (See Above)
2) Press & release the **Program Button** the correct number of times to select the desired Program Setting. The LED's will flash and the horn (optional) will honk to indicate the current setting that is selected.
4) Hold the Program Button until the parking lights /horn confirm the selected setting. The park lights will flash and the horn (optional) will honk to indicate the option selected within the setting.
5) Turn the ignition key "Off" to exit Program Mode.

SYSTEM RESET

In some cases it may be necessary to reset the system to it's default settings. The system reset will change all program settings to there default setting (**Bold Text**). A system reset must also be preformed when the tach setting is to be re-learned.

1) Within 3 seconds turn the key ON-OFF-ON-OFF-ON (Leaving Key ON).
2) Press and release the Program Button.
3) The park lights will turn ON and the horn(Optional) will honk once.
4) Press the Program Button a second time and hold for 8 seconds.
The park lights will flash and the horn (Optional) will honk 3 times.

The System is now re-set to the factory default settings.

INSTALLATION MANUAL

Programming Menu

Turn the ignition key to the on position 3 times then press and release the program button. The park lights will turn on and the horn(Optional) will honk once. While the park lights are on press and release the program button until the LED is flashing the same number of times as the program setting that is to be changed. Press and hold the program switch until the park lights flash the correct number of times as the option to be programmed.

Setting 1- Special Door Lock/ Unlock Operations

1 Type 1	1 Flash	Unlock before start. Lock pulse after start and shutdown
2 Type 2	2 Flashes	Lock pulse only after remote starter shuts off
3* Normal Operation	**3 Flashes**	**No additional re-lock pulses**

Press the Program Button 1 time to select setting 1 (This will be confirmed by 1 LED flash)
Press and hold the Program Button until you receive the appropriate # of park light flashes and horn honks.
Release the Program Button . Press momentarily to move to next program step or repeat to change selection.

Setting 2- Gas/ Diesel Mode- Blue Wire on 14-Pin

1 Negative Input/ 30seconds	1 Flash	Waits a maximum 30 seconds before starting.
2 Timed Delay/ 15 Seconds	2 Flashes	Ignition ON for 15 seconds before engaging remote starter
3* Gas/ Positive Glow Plug	**3 Flashes**	**Waits 2 seconds to start if no diesel input is detected**

Press the Program Button 2 time to select setting 2 (This will be confirmed by 2 LED flashes)
Press and hold the Program Button until you receive the appropriate # of park light flashes and horn honks.
Release the Program Button . Press momentarily to move to next program step or repeat to change selection.

Setting 3- Rearm Output- Yellow Wire on 14-Pin

1 Type 1	1 Flash	Pulse after start and with lock
2 Type 2	2 Flashes	Pulse after start only
3* Factory Re-arm	**3 Flashes**	**0.75 second pulse with lock and after shutdown**

Press the Program Button 3 times to select setting 3 (This will be confirmed by 3 LED flashes)
Press and hold the Program Button until you receive the appropriate # of park light flashes and/or horn honks.
Release the Program Button. Press Program Button momentarily to move to next program step or repeat to change selection.

Setting 4- Run Time

1 30 Min Run Time	1 Flash	Remote Starter runs for 30min when activated
2 45 Min Run Time	2 Flashes	Remote Starter runs for 45min when activated
3* 15 Min Run Time	**3 Flashes**	**Remote Starter runs for 15 min when activated**

Press the Program Button 4 times to select setting 4 (This will be confirmed by 4 LED flashes)
Press and hold the Program Button until you receive the appropriate # of park light flashes and/or horn honks.
Release the Program Button. Press Program Button momentarily to move to next program step or repeat to change selection.

See page 6 for Entering Program Mode.

Setting 5-Maximum Crank Time

1 10 Seconds	1 Flash	10 sec Max time that starter will stay engaged
2 3 Seconds	2 Flashes	3 sec Max time that starter will stay engaged
3*5 seconds	**3 Flashes**	**5 sec Max time that starter will stay engaged**

Press the Program Button 5 times to select setting 5 (This will be confirmed by 5 LED flashes)
Press and hold the Program Button until you receive the appropriate # of park light flashes and/or horn honks.
Release the Program Button. Press Program Button momentarily to move to next program step or repeat to
 change selection.

Setting 6- Tach Selection

1Tach Detection Mode	1 Flash	Set for Tach Detection - Must Connect Tach Wire
*2Tachless Mode	**2 Flashes**	**No Tach connection required**

Press the Program Button 6 times to select setting 6 (This will be confirmed by 6 LED flashes)
Press and hold the Program Button until you receive the appropriate # of park light flashes and/or horn honks.
Release the Program Button. Press Program Button momentarily to move to next program step or repeat to
change selection

Setting 7- Adjust For Over-Crank

1 - Enter Program Mode (Ignition ON-OFF-ON-OFF-ON) then press the Program Button.
2 - Press the Program Button - **7 times** (Led will start flashing 7 times).
3 - Hold the Program Button - For 5 seconds until parking lights flash (each time lights flash tach is reduced).
4 - Release the Button - Exit Program Mode and remote start to test.

Setting 8- Adjust For Under-Crank

1 - Enter Program Mode (Ignition ON-OFF-ON-OFF-ON) then press the Program Button.
2 - Press the Program Button - **8 times** (Led will start flashing 8 times).
3 - Press and Hold Program - For 5 seconds until parking lights flash (each time lights flash tach is increased).
4 - Release Program - Exit Program Mode then remote start to test.

Setting 9- Start Trigger Input- Number of pulses to activate Remote Starter

1 Pulse Once	1 Flash	One pulse required to activate the remote starter.
*2Pulse Twice	**2 Flashes**	**Two pulses required to activate the remote starter.**

Press the Program Button 9 times to select setting 9 (This will be confirmed by 9 LED flashes)
Press and hold the Program Button until you receive the appropriate # of park light flashes and/or horn honks.
Release the Program Button. Press Program Button momentarily to move to next program step or repeat to
change selection